



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Russell et al.

U.S. Serial No.:

09/043,665

Filed:

October 5, 1998

Entitled:

Materials and Methods

Relating to the Transfer of

Nucleic Acid into Quiescent

Attorney Docket No.: 4219/1340

Assistant Commissioner for Patents

Washington, D.C. 20231

Group Art Unit: 1632

Examiner: Shukla, R.

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AMENDMENT AND RESPONSE

This amendment is filed in response to the Office Action, dated January 6, 2000, in the above identified application. Please amend the application as indicated below.

IN THE CLAIMS

Please amend claims 1 and 4.

1. (Amended) A method of transforming a population of quiescent cells with a nucleic acid encoding a polypeptide for treating a disease or disorder, the method comprising:

exposing the cells to [(a)] a retroviral packaging cell line expressing nucleic acid encoding a growth factor, [or (b) retroviral particles expressing nucleic acid encoding the growth factor as a fusion with a viral envelope protein,] so that the growth factor is displayed on the surface of the cell line [or the viral particles], the cell line [or retroviral particles] carrying a vector comprising the nucleic acid encoding the polypeptide for treating the disease or disorder,

wherein the surface bound growth factor induces the cells to divide, so that the nucleic acid encoding the polypeptide for treating a disease or disorder can incorporate into the genome of the cells.

